

REMARKS

Reconsideration is respectfully requested of the related objections to the Information Disclosure Statement (IDS) and to the specification in paragraphs 2 and 3 of the Office Action.

The Examiner's attention is respectfully directed to 37 C.F.R. §1.98 and MPEP §609 on "37 C.F.R. §1.98 content of information disclosure".

37 C.F.R. §1.98 states that,

"(a) Any information disclosure statement filed under § 1.97 shall include:

(1) A list of all patents, publications, applications, or other information submitted for consideration by the Office:"

37 C.F.R. §1.98(a)(2)(iii) specifies,

" (iii) For each cited pending U.S. application, the application specification including the claims, and any drawing of the application, or that portion of the application which caused it to be listed including any claims directed to that portion,"

37 C.F.R. §1.98(b)(3) states that,

"(3) Each U.S. application listed in an information disclosure statement must be identified by the inventor, application number, and filing date."

All of the above requirements have been completely fulfilled by the IDS filed herein.

Moreover, IDS Form PTO-A820 states at the first heading "U.S. PATENT DOCUMENTS", not U.S. PATENTS, and has the subheading "DOCUMENT NUMBER", not PATENT NUMBER.

Moreover, there is absolutely no requirement in any of the rules or regulations that the specification include references mentioned in an Information Disclosure Statement.

In conclusion, the undersigned attorney has filed numerous IDSs citing pending U.S. patent applications, and has never encountered the objections set forth in paragraphs 2 and 3 of the Office Action, and if the Examiner is inclined to persist in these objections, the Examiner is urged to consult with one or more Supervisory Examiners on these issues.

Reconsideration is respectfully requested of the rejection of Claims 1 and 3 under 35 U.S.C. 103(a) as being unpatentable over Holt III, U.S. Patent No. 6,324,565 in view of Shimomura, et al., U.S. Patent No. 6,526,580, and the rejection of Claims 2 and 4 under 35 U.S.C. 103(a) as being unpatentable over Holt III, and Shimomura, further in view of Chandra, et al., U.S. Patent No. 6,457,047.

In summary, the prior art does not even remotely disclose or suggest the problems address and solved by the present invention, and does not even remotely disclose or suggest the solution provided by the present invention, and the prior art rejections appear to be based totally upon hindsight, with no teaching or motivation provided by the prior art itself to combine the references in a manner as suggested by the Examiner.

The Present Invention

The problems with the prior art are explained in the specification at Page 2, lines 3-9, as follows.

The WWW architecture is continuously expanding to support the network connectivity of all types of handheld devices. The traditional HTML file format has failed to

support all the required formats and displays of all these devices at the same time. After analyzing the requirements of end users, the inventors were able to discover that with respect to all types of handheld devices, it is the very critical information that is usually most needed by users. In comparison to the data needed by users, rich expressive forms like those provided PC's are merely subsidiary matters.

The need for the present invention is explained on Page 3, line 16, to Page 4, line 2, as follows.

It can be seen from the diagram shown in Fig. 2, in attempts to enable any service organization, such as stock exchange 31, to provide essentially the same services, such as inquiries on the current price of a stock with code number 0001, to different types of pervasive computing devices, proper design and development of appropriate software and hardware must be made in advance for those pervasive computing devices. This requirement came as a result of the fact that different types of pervasive computing devices diverge widely in their capabilities of computing, display, and communication. Besides, different communication protocols may be adopted in different network communication medium.

Therefore, if a kind of unified information service platform can be provided for applications on various different types of pervasive computing devices, there will be no necessity for the development of many information service systems in which each system is developed for one type of pervasive computing device alone. The advantage reaped would be a development boosting the information service trade.

The object of the present invention is explained on Page 5, lines 17-22, as follows.

The object of the present invention is to provide a system and method of high efficiently caching data in view of the characteristics of pervasive computing devices. Thus, pervasive computing devices of various types can instantly and efficiently access critical information based on expanded Web system structure. And on the basis of this method, content service providers can promote the level of service provision for the clients.

The basis of the present invention is explained on Page 8, lines 3-7, as follows.

Through separating structure, content and presentation, the same XML source document only has to be written once, and it can be presented in different ways: on the display screens of computers, on the display screens of mobile telephones. It can also be translated into speech on devices serving blind people etc. It can run on any communication product that may possibly be developed.

The operation of the present invention is explained on Page 9, line 20, to Page 10, line 10, as follows.

The working process of information service platform 50 is described as follows. First the information service requests originated from PC 14, WAP mobile telephone 13 or palm computer 15 are received from Internet 23, WAP gateway 24 or hand-held device gateway 25. The information service request may either be requests to multi-resources or to a single resource. Then, corresponding information is acquired, in accordance to the received information service request, from their corresponding backend servers 41, 42, and 43 etc. Subsequently the acquired information is resolved into XML elements and is cached in units of XML elements. (On this point, this caching differs evidently from the caching in HTML page units currently adopted by WWW network.)

The important structural component of information service platform 50 is the cache system based on XML. (As shown by label 60 in Fig. 4) The cache system constructs an XML document with the cached XML elements or data directly acquired from backend servers. Then the XML document is returned to Internet 23, WAP gateway 24, or hand-held device gateway 25, as responses.

Fig. 4 shows in detail the internal structure of the cache system 60 based on XML. The cache system based on XML comprises a controller 51, a network connecting unit 52 and a cache 53.

Independent Claim 1 specifies the following structure and functions, and independent claim 3 has similar limitations.

“network connecting unit (52) for fetching data from backend servers (41, 42, 43) and packaging the data into XML elements;

cache (53) for caching the XML elements formed by said network connecting unit (52) by packaging; and

controller (51), in response to a request for information service from a client, for fetching relevant XML elements from cache (53), and for the XML elements that cannot be fetched from the cache (53), instructing the network connecting unit (52) to fetch corresponding data from backend servers and obtaining the XML elements formed by the network connecting unit (52) by packaging, and finally packaging all the fetched XML elements into a XML document and sending it back to the client.”

Holt III

Holt simply describes a dynamically generated document cache system designed to operate with HTML web pages, and does not even remotely disclose or explain the above-noted problems with the prior art, or the need, object, basis and solution of the present invention as explained above.

Shimomura et al.

Shimomura simply describes a broadband data broadcasting system that allows rich multi-media content to be delivered to a plurality of subscribers which is also explained in the context of HTTP protocol. The extensible Markup Language (XML) is mentioned only once on Page 11, line 20, but the disclosure of Shimomura is on an HTTP protocol based system. In summary, Shimomura does not even remotely disclose or explain the above-noted problems with the prior art, or remotely disclose or explain the need, object, basis and solution of the present invention as explained above.

Chandra et al.

Chandra was only cited and applied for disclosure of an indexing mechanism, which is only one minor feature of the present invention. In summary, Chandra does not even remotely disclose or explain the above-noted problems with the prior art, or remotely disclose or explain the need, object, basis and solution of the present invention as explained above.

Applicants respectfully submit that the Examiner is clearly using impermissible hindsight in combining the references with the knowledge of an ordinarily skilled artisan in the art at the time of the invention. Thus, their combination to defeat the patentability of the claims is improper. That is, there is no motivation to combine the Holt,

Shimomura and Chandra references with any specific understanding or technological principle within the knowledge of one of ordinary skill in the art regarding the problems addressed by the present invention.

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the references or to combine the references teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all of the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Furthermore, recently the U.S. Court of Appeals for the Federal Circuit (the Federal Circuit) restated the legal test applicable to rejections under 35 U.S.C. 103(a) (*In re Rouffet*, 47 USPQ2d 1453 (Fed. Cir., July 15, 1998)). The Court stated:

[V]irtually all [inventions] are combinations of old elements. Therefore an Examiner may often find every element of a claimed invention in the prior art. Furthermore, rejecting patents solely by finding prior art corollaries for the claimed elements would permit an Examiner to use the claimed invention itself as a blueprint for piecing together elements in the prior art to defeat the patentability of the claimed invention. Such an approach would be an illogical and inappropriate process by which to determine patentability. To prevent the use of hind sight based on the invention to defeat patentability of the invention, this court requires the Examiner to show a motivation to combine the references that create the case of obviousness. The Board [of Appeals] did not, however, **explain what specific understanding or technological principle within the knowledge of one of ordinary skill in the art would have suggested the combination**. Instead, the Board merely invoked the high level of skill in the field of the art. If such a rote indication could suffice to supply a motivation to combine, the more sophisticated scientific fields would rarely, if ever, experience a patentable technical advance. Instead, in complex scientific fields, the Board could routinely

identify the prior art elements in an application, invoke the lofty level of skill, and rest its case for rejection. To counter this potential weakness in the obviousness construct the suggestion to combine requirements stands as a critical safeguard against hindsight analysis and rote application of the legal test for obviousness.

In re Rouffet, 47 USPQ2d 1457-58 (Fed. Cir., July 15, 1998) (citations omitted, emphasis added).

More recently, the Federal Circuit again dealt with what is required to show a motivation to combine references under 35 U.S.C. 103(a). In this case the court reversed the decision of the Board of appeals stating:

[R]ather than pointing to specific information in Holiday or Shapiro that suggest the combination..., the Board instead described in detail the similarities between the Holiday and Shapiro references and the claimed invention, noting that one reference or the other-in combination with each other... described all of the limitations of the pending claims. Nowhere does the Board particularly identify any suggestion, teaching, or motivation to combine the ... references, nor does the Board make specific or even inferential findings concerning the identification of the relevant art, the level of ordinary skill in the art, the nature of the problem to be solved, or any factual findings that might serve to support a proper obviousness analysis.

In re Dembiczak, 50 USPQ2d 1614, 1618 (Fed. Cir., April 28, 1999) (citations omitted, emphasis added).

Thus, from both *In re Rouffet* and *In re Dembiczak* it is clear that the Federal Circuit requires a specific identification of a suggestion, motivation, or teaching why one of ordinary skill in the art would have been motivated to select the references and combine them or an identification of the level of skill in the art at the time of the invention which would make him likely to combine his skill with the teachings of the art to come up with the invention. This the Examiner has not done.

There is simply no teaching or suggestion in the art, nor is there a showing that someone skilled in the art at the time of the invention recognized the

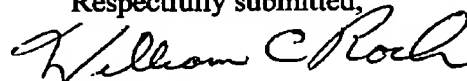
problem addressed by the present invention. For these reasons it would not have been obvious to someone of ordinary skill in the art to modify the Holt, Shimomura and Chandra references as proposed by the Examiner.

Thus, Applicants respectfully submit that the Examiner, without identifying the level of skill in the art at the time of the invention or a recognition of the problems addressed by the present invention, has clearly used impermissible hindsight to reject claims 1-4 under 35 U.S.C. 103(a).

In light of the state of the law as set forth by the Federal Circuit and the Examiner's lack of specificity of a requisite motivation, applicants respectfully submit that the rejections for obviousness under 35 U.S.C. 103(a) lack the requisite motivation and must be withdrawn.

In view of the above, it is respectfully submitted that this application is in condition for allowance. Accordingly, it is respectfully requested that this application be allowed and a Notice of Allowance issued. If the Examiner believes that a telephone conference with Applicants' attorneys would be advantageous to the disposition of this case, the Examiner is requested to telephone the undersigned.

Respectfully submitted,



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